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社会開発調査部報告書

# SULTANATE OF OMAN

## MINISTRY OF COMMUNICATIONS DIRECTORATE GENERAL OF ROADS

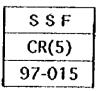


## CONSTRUCTION OF FLYOVER AT NASEEM GARDEN ROUNDABOUT BATINAH HIGHWAY

#### **TENDER DOCUMENTS**

#### **BILL OF QUANTITIES**

JKA LIBRARY



March, 1997

PACIFIC CONSULTANTS INTERNATIONAL FUKUYAMA CONSULTANTS INTERNATIONAL

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BIJ         No       Description         SECTION 100 PRELIMINARIES         SECTION 100 PRELIMINARIES         101 Bonds and Insurance         Performance Bond (Clause 10 of Standard Cor         Insurance of the Works (Clause 21 of Standard Cor         Insurance of the Works (Clause 21 of Standard Cor         Insurance of the Works (Clause 21 of Standard Cor         Insurance of the Works (Clause 21 of Standard Cor         Insurance of the Works (Clause 21 of Standard Cor         Damage to Persons and Property         (Clause 22 of Standard Condition of Contract)         Third Party Insurance         (Clause 23 of Standard Conditions of Contract)         Accident or injury to Workmen         (Clause 24 of Standard Condition of Contract)		CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN	YOVER A	Ł		
No     Description     Unit     Estimated     Unit Rate     Amount       SECTION 100 PRELIMINARIES     Quantity     R.O. Bz     R.O.       SECTION 100 PRELIMINARIES     Iump sum     Quantity     R.O. Bz     R.O.       Performance     Bonds and Insurance     Iump sum     Iump sum       Performance Bond (Clause 10 of Standard Conditions of Contract)     Iump sum     Iump sum       Damage to Persons and Property     Iump sum     Iump sum       Clause 21 of Standard Conditions of Contract)     Iump sum     Iump sum       Clause 23 of Standard Conditions of Contract)     Iump sum     Iump sum       Clause 24 of Standard Condition of Contract)     Iump sum     Iump sum       Accident or njury to Workmen     Iump sum     Iump sum       Clause 24 of Standard Condition of Contract)     Iump sum     Iump sum		BILL OF QUANTI BILL 1 - PRELIMIN	TIES ARIES			
SECTION 100 FRELIMINARIES     Quantity     R.O. Bz     R.O.       SECTION 100 FRELIMINARIES     SECTION 100 FRELIMINARIES     101 Bonds and Insurance     101 Bonds and Insurance       101 Bonds and Insurance     Performance Bond (Clause 10 of Standard Conditions of Contract)     hump sum     hump sum       Performance Bond (Clause 21 of Standard Conditions of Contract)     hump sum     hump sum       Damage to Persons and Property     lump sum     hump sum       Clause 22 of Standard Conditions of Contract)     hump sum     hump sum       Clause 23 of Standard Conditions of Contract)     hump sum     hump sum       Clause 23 of Standard Condition of Contract)     hump sum     hump sum       Clause 24 of Standard Condition of Contract)     hump sum     hump sum	Item N		Unit	Estimated	Unit Rate	Amount
SECTION 100 PRELIMINARIES     101 Bonds and Insurance       101 Bonds and Insurance     Performance Bond (Clause 10 of Standard Conditions of Contract)       Insurance of the Works (Clause 21 of Standard Conditions of Contract)     lump sum       Insurance of the Works (Clause 21 of Standard Conditions of Contract)     lump sum       Insurance of the Works (Clause 21 of Standard Conditions of Contract)     lump sum       Damage to Persons and Property     lump sum       Clause 22 of Standard Conditions of Contract)     lump sum       Mirid Party Insurance     lump sum       Clause 23 of Standard Conditions of Contract)     lump sum       Accident or injury to Workmen     lump sum       Clause 24 of Standard Condition of Contract)     lump sum				Quantity		
101 Bonds and Insurance         Performance Bond (Clause 10 of Standard Conditions of Contract)       lump sum         Insurance of the Works (Clause 21 of Standard Conditions of Contract)       lump sum         Damage to Persons and Property       lump sum         Damage to Persons and Property       lump sum         Clause 22 of Standard Conditions of Contract)       lump sum         Third Party Insurance       lump sum         Clause 23 of Standard Conditions of Contract)       lump sum         Accident or injury to Workmen       lump sum         Clause 24 of Standard Condition of Contract)       lump sum		SECTION 100 PRELIMINARIES				-
Performance Bond (Clause 10 of Standard Conditions of Contract)     lump sum       Insurance of the Works (Clause 21 of Standard Conditions of Contract)     lump sum       Damage to Persons and Property     lump sum       Damage to Fersons and Property     lump sum       Clause 22 of Standard Conditions of Contract)     lump sum       Third Party Insurance     lump sum       (Clause 23 of Standard Conditions of Contract)     lump sum       Accident or injury to Workmen     lump sum       (Clause 24 of Standard Condition of Contract)     lump sum		101 Bonds and Insurance				
Insurance of the Works (Clause 21 of Standard Conditions of Contract) lump sum Damage to Persons and Property (Clause 22 of Standard Condition of Contract) Third Party Insurance (Clause 22 of Standard Conditions of Contract) Accident or injury to Workmen (Clause 24 of Standard Condition of Contract) Accident or injury to Workmen (Clause 24 of Standard Condition of Contract) 1-1 Carried to summary	101.1	Performance Bond (Clause 10 of Standard Conditions of Contract)	lump sum			
Damage to Persons and Property     Lump sum       (Clause 22 of Standard Condition of Contract)     Lump sum       Third Party Insurance     Lump sum       (Clause 23 of Standard Conditions of Contract)     Lump sum       Accident or injury to Workmen     Lump sum       (Clause 24 of Standard Condition of Contract)     Lump sum	101.2		lump sum			
Third Farty Insurance (Clause 23 of Standard Conditions of Contract) Accident or injury to Workmen (Clause 24 of Standard Condition of Contract) 1-1 Carried to summary	101.3	Damage to Persons and Property (Clause 22 of Standard Condition of Contract)	lump sum			
Accident or injury to Workmen (Clause 24 of Standard Condition of Contract) 1-1 Carried to summary	101.4	Third Party Insurance (Clause 23 of Standard Conditions of Contract)	lump sum			
Carried to summary	101.5	Accident or injury to Workmen (Clause 24 of Standard Condition of Contract)	mns dmnl			
Carried to summary						
			1-1	C <sup>a</sup>	rried to summary	44250.000

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Item No	BILL OF QUANTITIES				
	BILL 1 - PRELIMINARIES	TIES ARIES			
10	Description	Unit	Estimated	Unit Rate	Amount
10			Quantity	R.O. Bz	R.O. Bz
	104 Facilities for the Engineer				
104.1 Pro	Provision of Engineer's office (Type A, 1 unit x 20)	month	20	250.000	5000.000
104.2 Ma	Maintenance of Engineer's office (Type A, 1 unit x 20)	month	20	150.000	3000.000
104.3 Pro	Provision of surveying instruments	month	18	300.000	5400.000
104.4 Ma	Maintenance of surveying instruments	month	18	150.000	2700.000
104.5 Pro	Provision of Engineer's accommodation				
<u>()</u>	(i) Resident Engineer's accommodation (Type B, 2 unit )	month	85	250.000	9500.000
Ē	(ii) Engineer's accommodation (Type C, 4 units )	month	やし	150.000	11100.000
(iv)	(iv) Dining/Kitchen (Type D, 1 unit x 18)	month	18	250.000	4500,000
		1-2	C	Carried to summary	41200.000

	A'NASEEM GARDEN BILL OF QUANTITIES BILL 1 - PRELIMINARIES	DEN DEN TIES ARIES	-		
Item No	Description	Unit	Estimated	١¥١	5t
104.6	Maintenance of Engineer's accommodation		Quantity	R.O. Bz	R.O. Bz
	(i) Resident Bngincer's accommodation (Type E. 2 units)	month	38	150.000	5700.000
	(ii) Engineer's accommodation (Type C, 4 unit )	month	74	250.000	18500.000
	(iv) Dining/Kitchen (Type D, 1 unit x 18)	month	18	250.000	4500.000
104.7	Provision of laboratory	month	18	400.000	7200.000
104.8	Maintenance of laboratory	month	18	150.000	2700.000
104.10	In situ soil bearing capacity tests	n.r.	50	20.000	400.000
104.11	Sub-soil investigation by specialist Contractor	prov. sum		8,000.000	8000.000
		1-3	Ca)	Carried to summary	47000,000

Item No     Description     Unit     Estimated		CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 1 - PRELIMINARIES	OVER A' EN IES RIES	f-r		
IO5 Assistance for Engineer     Quantity       Laborers to assist the Engineer ( no x months)     Man month       IO6 Contractor's Compound     N/A       IO6 Contractor's Compound     N/A       Mobilization and demobilization of Contractor's facility     Iump sum       Maintenance of Contractor's facility     month       IO7 Maintenance of Contractor's facility     month       Buttenance of Contractor's facility     month       IO7 Maintenance of Contractor	Item No		Unit	Estimated	Unit Rate	Amount
105 Assistance for Bngincer     105 Assistance for Bngincer     N/A       Laborers to assist the Engineer (no x months)     man month     N/A       106 Contractor's Compound     hump sum     N/A       Mobilization and demobilization of Contractor's facility     hump sum     18       Maintenance of Contractor's facility     hump sum     18       Maintenance of Contractor's facility     month     18       Maintenance and Protection of Traffic     hump sum     18       Maintenance and protection of traffic     ump sum     18       Maintenance and protection of traffic     hump sum     18       Maintenance and protection of traffic     ump sum     18       Maintenance and protection of traffic     um     18       Maintenance and protection of traffic     tum     tum       Maintenance and protection of traffic     tum     tum				Quantity		R.O. Bz
Laborers to assist the Engineer (no x months)man monthN/A106 Contractor's Compound106 Contractor's Compoundhump sumMobilization and demobilization of Contractor's facilityhump sum18Maintenance of Contractor's facilitymonth18107 Maintenance and Protection of Traffichump sum18Maintenance and Protection of Traffichump sum18Maintenance and Protection of trafficcu. m.10Maintenance and Protection of traffichump sum10Maintenance and Protection of traffichump sum10		105 Assistance for Bugincer				
106 Contractor's Compound108Mobilization and demobilization of Contractor's facilitylump sumMaintenance of Contractor's facilitymonth107 Maintenance and Protection of Trafficmonth107 Maintenance and Protection of Trafficlump sumMaintenance and protection of trafficlump sumExtra over item 107.1 for supply and compaction of subbase on diversionscu. m.battra over item 107.1 for supply and compaction of bituminous basecoursecu. m.Intersions where ordered by the Engineer (10 cm. thick)cu. m.Intersions where ordered by the Engineer (3 cm. thick)cu. m.Intersions where ordered by the Engineer (3 cm. thick)lump			nan month	N/A		
Mobilization and demobilization of Contractor's facilitylump sumMaintenance of Contractor's facilitymonth18107 Maintenance and Protection of Trafficmonth18Maintenance and protection of trafficlump sum10Maintenance and protection of trafficcu.m.10Extra over item 107.1 for supply and compaction of subbase on diversionscu.m.Extra over item 107.1 for supply and compaction of subbase on diversionscu.m.Item ordered by the Engineer (10 cm. thick)cu.m.Extra over item 107.1 for supply and compaction of bituminous basecoursecu.m.		106 Contractor's Compound			<b>.</b>	
Maintenance of Contractor's facilitymonth18107 Maintenance and Protection of Trafficnump sumMaintenance and protection of traffichump sumExtra over item 107.1 for supply and compaction of subbase on diversionscu. m.Extra over item 107.1 for supply and compaction of bituminous basecoursecu. m.Extra over item 107.1 for supply and compaction of bituminous basecoursecu. m.	106.1	Mobilization and demobilization of Contractor's facility	lump sum			100000.000
107 Maintenance and Protection of Traffic107 Maintenance and protection of trafficMaintenance and protection of trafficlump sumExtra over item 107.1 for supply and compaction of subbase on diversionscu. m.Extra over item 107.1 for supply and compaction of bituminous basecoursecu. m.Extra over item 107.1 for supply and compaction of bituminous basecoursecu. m.Image: State over item 107.1 for supply and compaction of bituminous basecoursecu. m.Image: State over item 107.1 for supply and compaction of bituminous basecoursecu. m.	106.2	Maintenance of Contractor's facility	month	18	5,000.000	000.00006
Maintenance and protection of trafficlump sumExtra over item 107.1 for supply and compaction of subbase on diversionscu. m.Extra over item 107.1 for supply and compaction of bituminous basecoursecu. m.Extra over item 107.1 for supply and compaction of bituminous basecoursecu. m.Image: Image: Image		107 Maintenance and Protection of Traffic				·
Extra over item 107.1 for supply and compaction of subbase on diversions cu. m. where ordered by the Engineer (10 cm. thick) Extra over item 107.1 for supply and compaction of bituminous basecourse cu. m. on diversions where ordered by the Engineer (3 cm. thick) 1.4	107.1	Maintenance and protection of traffic	lums dunl			100000.000
Extra over item 107.1 for supply and compaction of bituminous basecourse cu. m. on diversions where ordered by the Engineer ( 3 cm. thick) 1-4	107.2	Extra over item 107.1 for supply and compaction of subbase on diversions where ordered by the Engineer (10 cm. thick)	cu. m.			
	107.3	Extra over item 107.1 for supply and compaction of bituminous basecourse on diversions where ordered by the Engineer ( 3 cm. thick)	сп. т.			
			1-4	Ca	rried to summary	290000.000

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Item No	Description	Unit	Estimated Quantity	Unit Rate R.O. Bz	Amount R.O.
	108 Progress Photographs				
105.1	Provision of negatives and 5 sets of photographs (14 photos max.) (Mountable-Size 100 x 150 mm.)	month	18	30.000	540.000
	109 Sign Boards				
1.601	Provision, erection, moving and maintenance of signboard (Wooden Type)	л.г.	7	300.000	600.000
	110 Commemoration Plaque and Opening Ceremony				
110.1	Supply and erection of commemoration plaque (Optional)	n.r.	1	option	
110.2	Opening ceremony (Optional)	lump sum			
			·		
		1-5	Ca	Carried to summary	1140.000

Clause No
1-6 Carried to summary

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	A'NASEEM GARDEN BILL OF QUANTITIES	EN LES			
Item No	DESCRIPTION DESCRIPTION - FARELLIMITIVANLES Unit	Unit	Estimated Quantity	Unit Rate R.O. Bz	Amount R.O. Bz
	SUMMARY		2		
	Page 1-1				44250.000
	Page 1.2				41200.000
	Page 1-3				47000.000
	Pare 1-4				290000.000
	Pare 1-5				1140.000
	Page 1-6				0.000
			-		
		1-7	To	To Ground Summary	423590,000

	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 2 - EARTHWORKS	YOVER A EN TIES )RKS			
Item No	Description	Unit	Estimated	Unit Rate	Amount
			Quantity	R.O. Bz	R.O. Bz
	200 EARTHWORKS				
	201 Clearing and Grubbing				
201.1	Removal and delivery of trees of 300mm trunk diameter or greater	n.r.	69	15.000	1035.000
	202 Removal of Structures and Obstructions				
202.1	Removal of existing building (Shop)	ה,צ.	ы	200.000	200.000
202.2	Removal of mise. reinforced concrete structures	cu. m.	34	5.000	170.000
202.3	Removal of pipe culvert (D=0.6,0.75,0.9)	lin.m.	248	2.000	496.000
202.4	Removal of asphaltic concrete pavement (100 mm thick)	cu. m.	5771	2.000	11542.000
202.5	Removal of damaged steel safety barrier (Gurdrail)	lin.m.	2806	1.800	5050.800
ar Lan Salah ang Salah sa Sala					
		2-1	Ca	Carried to summary	18493.800

² Z	BILL 2 - EARTHWORKS	BILL OF QUANTITIES 3ILL 2 - EARTHWORKS			-
	Description	Unit	Estimated	Unit Rate	Amount
			Quantity	R.O. Bz	R.O. Bz
ZUZ.6	Remove carefully and relocate sign boards and road signs (size)	n.r.	42	3.500	147.000
202.7 Re	Removal of damaged Irish crossing marker posts	n.r.	N/A	2.500	
202.8 Re	Removal of damaged drainage protection works (gabions, conc. tiles, mortared riprap, dry rip rap)	cu. m.	N/A	3.500	
202.9 Rei	Removal of existing fences (wire mesh, chicken wire)	lin.m.	V/N	1.500	
202, 10 Rei	Removal of existing fences (block or masonry wall)	lin.m.	324	2.000	648.000
202.11 Rei	Removal of existing box culvert (2 x 1 m)	lin.m.	43	ã.000	215.000
202,12 Re:	Removal of existing interlocking tiles	sq. m	1040	1.200	1248.000
202.13 Rei	Removal of existing crush stone	lin.m.	N/A	1.000	
202.14 Rer	Removal of existing plain concrete	cn. m.	18	2.000	162.000
202.15 Rer	Removal of Curb Stone	£	1057	1.500	1585.500
		2.2	Ca	Carried to summary	4005.500

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	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 2 - EARTHWORKS	KOVER A EN TES RKS	Fr		an ann ann ann ann an 2017 an 2017 an 2017 an 2017 ann 20
Item No	Description	Unit	Estimated	Unit Rate	Amount
			Quantity	R.O. Bz	R.O. Bz
	203 Earthworks Excavation				
203.1	Suitable excavation to embankment	cu. m.	18430	0.600	11058.000
203.2	Suitable excavation to waste	cn. m.	N/A	0.300	
203.3	Unsuitable excavation to waste	cu. m.	N/A	0.400	99. (99. j. 20. j. 2
203.4	Borrow excavation to embankment	cn. m.	62000	1.500	93000.000
203.5	Extra over item 203.1 ,2, 3 for excavation under water	cn. m.	N/A	3.000	
	206 Excavation and Backfilling for Structures				
206.1	Structurc excavation in soils to a depth of 2m	cu, m.	370	1.000	370.000
206.2	Structure excavation in soils to a depth more than 2m	cu. m.	N/A	1.700	
		2-3	Ca	Carried to summary	104428.000

	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 2 - EARTHWORKS	YOVER A )EN TIES DRKS	T		
Item No	Description	Unit	Estimated Quantity	Unit Rate R.O. Bz	Amount R.O. Bz
206.3	Structural excavation in rock to a depth of 2m	cu. m.	N/A		
206.4	Structural excavation in rock to a depth more than 2m	cu. m.	N/A		
206.5	Extra over 206.1.2,3,4 for excavation under water	cu, m.	N/A		
206.6	Structurel Excavationt in soils to waste	cu.m	N/A		
		2.4	Car	Carried to summary	0.000
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· · · · · · · · · · · · · · · · · · ·	BILL 2 - EARTHWORKS	s S	-		
Item No	Description	Unit	Estimated	۲ <u>ڳ</u>	멍
	SUMMARY		Quantity	R.U.	.0.y
	Page 2-1				18493.800
	Page 2-2				4005.500
	Page 2-3				104428.000
	Page 2-4				0.000
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		2-5	To	To Grand Summary	126927.300

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F.3	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 3 - GRANULAR AND STABILIZED SUBBASE, BASE COURSE, STABILIZED SUBGRADE	XUVER A VEN FIES ASE COU	.I RSE, STABII	UIZED SUBGI	LADE
Item No	Description	Unit	Estimated	Unit Rate	Amount
			Quantity	R.O. Bz	R.O. Bz
	300 GRANULAR AND STABILIZED SUBBASE, BASECOURSE AND STABILIZED SUBGRADE				
	302 Granular Subbase				
302.1	Granular subbase (class B) (150 mm thick)	cn. m.	2347	2.000	4694.000
	303 Aggregate Basecourse				
303.1	Aggregate basecourse (class B) (300 mm thick)	cu. m.	N/A	3.600	
303.2	Aggregate basecourse (class E) (250 mm thick)	cu. m.	N/A	3.200	
303.3	Aggregate basecourse (class B) (200 mm thick)	cn. m.	10239	2.700	27645.300
303.4	Aggregate basecourse (class B) (150 mm thick)	cu. m.	1879	2.500	4697.500
		p,			
		3.1	C.	Carried to summary	37036.800

	CONSTRUCTION OF FLYOVER AT	YOVER A	Ъ		
	BILL 3 - GRANULAR AND STABILIZED SUBBASE, BASE COURSE, STABILIZED SUBGRADE	TIES ASE COU	RSE, STABII	IZED SUBGR	<b>LADE</b>
Item No	Description	Unit	Estimated	Unit Rate	ount
			Quantity	R.O. B2	R.O. Bz
	SUMMARY		<u> </u>		
	Page 3-1				37036.800
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		4	Ċ		<u>vo 40060</u>
		2-2 2	<u>د</u> ه	Carried to summary	00000000
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	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 4 - BITUMINOUS PAVEMENT	YOVER A EN MES AVEMEN	T Ť		
Item No	Description	Unit		Ψ	Amount
	400 BITUMINOUS PAVEMENT		Quantuy	A.V. D2	29 .O.W
-	401 Bituminous Prime Coat and Tack Coat				
401.1	Bituminous prime coat (MC 70)	tı H	50982	0.250	12745.500
401.2	Bituminous tack coat (RC 250)	55 -4	10239	0.300	3071.700
	402 Bituminous Basecourse				
402.1	Bituminous basecourse (class B) 50 mm.thick	cr. m.	1103	22.000	24266,000
402.2	Bituminous basecourse (class B) 100 mm.thick	cu.m.	2912	28.000	81536.000
402.4	Increse or decrese in bituminous content from nominal rate	ы Х	rate only	0.050	
		4-1	Ca	Carried to summary	121619.200

	BILL OF QUANTITIES BILL 4 - BITUMINOUS PAVEMENT	DEN ITIES PAVEMEI	чт		
Item No	Description	Unit	Estimated Quantity	Unit Rate R.O. Bz	Amount R.O. Bz
	405 Bituminous Wearing Course		2		
405.1	Bituminous wearing course (class B) (50 mm thick)	cn' m'	3442	28.000	96376.000
405.2	Increase or decrease in bitumen content from nominal rate	SB X	rate only	0.050	
<u> </u>					
		4-2	S	Carried to summary	96376.000

	Amount R.O. Bz		121619.200	96376.000		217995.200
	Unit Rate R.O. Bz				 	 Carried to summary
T T	Estimated Quantity				 	 Can
YOVER A DEN TIES PAVEMEN	Unit					 4-3
CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 4 - BITUMINOUS PAVEMENT	Description	SUMMARY	Page 4-1	Page 4-2		
:	Item No					

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ltcm No	A'NASEEM GARDEN BILL OF QUANTITIES BILL 5 - CONCRETE AND CONCRETE STRUCTURE	JEN TIES RETE ST	RUCTURE		
	Description	Unit	Estimated Quantity	Unit Rate R.O. Bz	Amount R.O. Bz
20	500 CONCRETE AND CONCRETE STRUCTURE				
20	504 Concrete for Structure				
504.1 Cc	Concrete Class 16/20 (OPC cement) Blinding, Gravity Wall	cn. m.	2548	30.000	76440.000
504.2 C	Concrete Class A 24/20 for retaining wall, abutment and piers (OPC)	cu.m	9957	35.000	348495.000
504.3 C	Concrete Class 32/20 for bridge deck. cross beam and joint	cu.m	383	50.000	19150.000
504.4 C	Cast-in-Situ Concrete Class 24/20 for bridge deck for cantilever	cu.m	1080	38.000	41010.000
-		5-1	Ca	Carried to summary	485125.000

	A'NASEEM GARDEN BILL OF QUANTITIES BILL AND CONCRETE STRUCTURE	S an Sar	a a travella		
Item No	Description U	Unit	Estimated	Unit Rate	Amount
			Quantity	R.O. Bz	R.O. Bz
	506 Prestressed Concrete for Bridge				
506.1	Precast. pre-stressed. bridge beam. reinforced concrete class AA40 including all reinforcement. tendons. tension cable strands. approved anchorage points "Freyssinet" system or equal and approved, sheaths. de-watering, pipes grouting in accordance with manufacturers recommendations, all complete and as detailed on tender drawings				
<u> </u>	a) PS Box girders (Internal). 32 m long n	הי	154	3,300.000	508200.000
· · · · · · · · · · · · · · · · · · ·	b) PS Box griders (External), 32 m long		44	3,600.000	158400.000
		5-2	Car	Carried to summary	666600.000

	BILL 5 - CONCRETE AND CONCRETE STRUCTURE	RETE ST	RUCTURE		
Item No	Description	Unit	Estimated Quantity	Unit Rate R.O. Bz	Amount R.O. Bz
1.7	509 Reinforcing Steel				
509.1 H	High yield steel bar reinforcement of any diameter	tone	815	285.000	232275.000
509.2 M	Mild steel bar reinforcement of any diameter	tone	N/A	300.000	
509.3 M	Mesh reinforcement of any size	tone	N/A	400.000	
-					
				<u>-</u>	
		5-3	C	Carried to summary	232275.000

	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 5 - CONCRETE AND CONCRETE STRUCTURE	KOVER A' EN MES RETE STI	r UCTURE		
Item No		Unit	Estimated Quantity	Unit Rate R.O. Bz	Amount R.O. Bz
The sum of the particular state	SUMMARY				
	Page 5-1				485125,000
1.5 = 1 <sup>-1</sup>	Page 5-2				666600.000
	Page 5-3				232275.000
		5-4	Cai	Carried to summary	1384000.000

	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL OF QUANTITIES	YOVER A' EN MES	Г Кътаї WORK		
Item No		Unit	Estimated	Unit Rate	Amount
			Quantity	R.O. Bz	R.O. Bz
	600 STRUCTURAL STEEL AND OTHER METALWORK				-
<del>مى تەرىخ بىر مە</del>	603 Bridge Parapets				
603.1	Bridge Handrails (Aluminum) (H=500 mm)	lin.m.	2320	45.000	104400.000
CURTER MANAGEM					
and and the state of the state			<u> </u>		
		6-1	Ca Ca	Carried to summary	104400.000

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ER METALWORK it Estimated Unit Rate A Quantity R.O. Bz R.O. Bz Carried to summary		A'NASEEM GARDEN BILL OF OLIANTITIES	XOVER A EN TES	7		
Description     Unit Rate     A       Quantity     R.O. Bz     R.O. Bz       SUMMARY     Pare 6.1     Pare 6.1		BILL 6 - STRUCTURAL STEEL AND	OTHER 1	METALWORI	K	
LRY	Item N		Unit	Estimated Quantity	Unit Rate R.O. Bz	Amount R.O. Bz
6.2 Carried to summary		SUMMARY				
Carried to summary		Page 6-1				104400.000
Carried to summary						
Carried to summary						
Carried to summary						
Carried to summary						
Carried to summary						
			6-2	Car	rried to summary	104400.000

	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 8 - DRAINAGE AND SERVICE DUCTE	TOVER A EN TES RVICE D	r UCTE		
Item No	Description	Unit	Estimated Quantity	Unit Rate R.O. Bz	Amount R.O. Bz
	800 DRAINAGE AND SERVICE DUCTS				
	801 Pipe Culverts				
801.1	Reinforced concrete pipe culvert ( 600 mm. dia.)	lin m	100	35.000	3500.000
801.2	Reinforced concretc pipe culvert ( 750 mm. dia.)	lin.m	ស	45.000	2475.000
	802 Reinforced Concrete Box Culverts, Box Culverts and Pipe Culverts Headwalls, Wingwalls and Aprons (SRP cement)				
	Concrete (Class 28/20), Box Culverts, Box Culverts and Pipe Culverts Headwalls, Wingwalls, Wingwalls, Wingwalls and Aprons (SRP Cement), all complete and as detailed on drawing	valls, Wingw ng	alls,		
802.1.1	Box culvert 2 x 1 m 1 cell	lin.m	47	60.000	2820.000
802.1.2	Box culvert 2 x 1 m 2 coll	lin.m	11	110.000	8470.000
		8-1	Ů	Carried to summary	17265.000

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	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 8 - DRAINAGE AND SERVICE DUCTE	YOVER A EN NES RVICE D	L UCTE		
Item No	Description	Unit	Estimated	۲ <u>۲</u>	님
	804 Catch Basins, Catch Pits, Manholes, Curb Inlets, Ditch Inlets and Outlets		Quantity	A.O.	к.О. 52
	Reinforced concrete catch pit comprising excavation, backfilling, disposal, 100 mm thick plain in-situ sulphate resisting concrete class (12/20) blinding concrete class (24/20) for structure, all complete and as detailed on drawing				
804.1	Catch Pits 1x1x2m	ח.ה	۴	180.000	720.000
	Reinforcwed concrete cullies comprising excavation, backfilling, disposal, 150 mm bed and walls of reinforces sulphate resisting concrete class (24/20) all complete and as detailed on drawings				
804.2	Gullics 300 x 300 mm	lin.m	728	25.000	18200.000
		8-2	Car	Carried to summary	720.000

	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES	YOVER A EN UES	£.		
	BILL 8 - DRAINAGE AND SERVICE DUCTE	RVICE D	UCTE		-
Item No	Description	Unit	Estimated	Unit Rate	Amount
			Quantity	R.O. Bz	R.O. Bz
	805 Water proofing for structure				
805.1	Waterproofing membrane	sq.m.	N/A	1.800	
S05.2	Mastic asphalt waterproofing	sq.m.	N/A	8.000	
805.3	Bituminous paint	sq.m.	504	0.350	176.400
in The Li					
n takan aya					
	SUI Service Ducts				
807.1	Service duct (A.C. 150 mm dia. +1 way with concrete surround), including duct markers	lin.m.	V/N		
807.1.1	Service duct (A.C. 150 mm dia2 way with concrete surround), including duct markers	lin.m.	55	4.000	308.000
807.2	Extra over for excavation in rock for service ducte	cu.m.	N/A		
		8-3	O.	Carried to summary	484.400
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	BILL BILL & DRAIN	BILL OF QUANTITIES RAINAGE AND SERVICE DIICTE	340110		
Item No	Description	Unit	Estimated Quantity	Unit Rate R.O. Bz	Amount R.O. Bz
	SUMMARY				
	Page 8-1			<u>.</u>	17265.000
cher nur musicapitaj	Page 8-2				720.000
and an	Page 8-3				484.400
2 <del> </del>			•		
ور بور م		8-4	Ca	Carried to summary	18469.400

		-			
	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN	YOVER A EN	L.		
	BILL OF QUANTITIES BILL 9 - SLOPE PROTECTION AND STABILISATION	TES ID STABI	LISATION		
Item No	Description	Unit	Estimated	Unit Rate	Amount
			Quantity	R.O. Bz	R.O. Bz
	900 SLOPE PLOTECTION AND STABILISATION				
	901 Riprap				
901.2	Mortared stone riprap (Class A), in Irish Crossing	cu.m.	N/A	13.000	
901.2.1	Mortared stone riprap (Class A), other than Irish Crossing	cu.m,	N/A	16.000	
<b></b>					
<del></del>	902 Gabions				
902.1	Gabions. 200 mm thick, galvanized steel wire	m.ps	N/A	10.000	
902.1.1	Gabions, 300 mm thick, galvanised steel wire	aq.m	001	14.000	1400.000
906.3	Grouting stone wash checks (type)	lin m.	N/A		
		9.1	Ca	Carried to summary	1400.000

	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN	IOVER A EN	54		
	BILL OF QUANTITIES BILL 9 - SLOPE PROTECTION AND STABILISATION	TES D STABI	LISATION		
Item No	Description	Unit	Estimated	Unit Rate	Amount
			Quantity	R.O. B2	R.O. Bz
• • • • • • • • •					
	SUMMARY				
	Page 9-1				1400.000
17. <b>19. 19.</b> 19. 19. 19. 19. 19. 19. 19. 19. 19. 19.					
17. <del>de s</del> ier-en aus					
		9-2	Car	Carried to summary	1400.000
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	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES	OVER A		202 1 110 CT	
Item No	BILL II - BRIDGE BEARIEGS, EAFANSION JOINT, JOINTS SEAL AND FILLERS Description Unit Estimated Unit Rate	Unit Unit	Estimated	Unit Rate	Amount R O Rz
	1100 BRIDGE BEARINGS, EXPANSION JOINT, JOINTS SEALS AND FILLERS		Ananuny		
	1101 Bridge Bearings				
1101.1	Synthetic Rubber Shoe 460 x 360 x 80 mm including anchor bar, cap, filler reinforcing bar, spiral bar and shrinkage mortar		242	40.000	9680.000
	1102 Bridge Expansion Joints				
1102.1	Bridge expansion joint Movement Range W=50 mm	E	44	150,000	6600.000
1102.1.1	Bridge expansion joint Movement Range W=100 mm	E	222	280.000	62160.000
an Rafa Millionne ar Brand					
		11-1	To	To Grand Summary	78440.000

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CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 11 - BRIDGE BEARIBGS, EXPANSION JOINT, JOINTS SEAL AND FILLERS	cription Unit Estimated Unit Rate Amount Quantity R.O. Bz R.O. Bz		78440.000				11-2 To Grand Summary 78440,000
CONSTRUCTIC A'NASE: BILL 11 - BRIDGE BEARIBGS, EXPAN	Item No Description	SUMMARY	Page 11-1				

	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES RILL 12 - SIDEWALKS PAVED AREAS AND CURBS	OVER A' SN IES SEAS AN	r D CURBS		
Item No		Unit	Estimated	Unit Rate	Amount
			Quantity	R.O. Bz	R.O. Bz
	1200 SIDE WALKS, PAVED AREAS AND CURBS				
1. 1 <b>1</b> 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1201 Sidewalks				HEFELT Fright IC Grundlet.
1201.1	Interlocking Block Pavement including granular Basecourse 150 mm thick	sq. m	2347	4.000	9388.000
	1202 Curbs				
	All curbs are hydraulically pressed sulphate resisting concrete class A (45/20) geded jointed and pointed in 10 mm thick sand cement grout. including all necessary excavation, backfill, dispose, formwork and all necessary works for complete	. A			
1202.1.1 1202.1.2 1202.1.3	Curb 100 x 200 (Mountable) Curb 150 x 350 (Mountable) Curb 150 x 350 (none mountable)	lin.m. lin.m lin.m.	4392 1864 80	3.500 5.000 4.000	15372.000 9320.000 320.000
		12-1	ũ	Carried to summary	9388.000

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	A'NASEEM GAKDEN BILL OF QUANTITIES	LEN			
Item No	BILL 12 · SIDEWALKS, PAVED AREAS AND CURBS Description Unit Estimated	AREAS A) Unit	ND CURBS Estimated	Unit Rate	Amount
			Quantity	R.O. Bz	R.O. Bz
SUMMARY					
Page 12-1					9388.000
					-
		12-2	Ca	Carried to summary	9388.000

	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 13 - SAFETY BARRIERS, DELINEATORS AND FENCES	YOVER A DEN TIES NEATORS	T AND FENCE	S	
Item No		Unit	Estimated	Unit Rate	Amount P.O. B.
	1300 SAFETY BARRIERS, DELINEATORS AND FENCE		Quantity	29 .0.4	
	1301 Corrugated Steel Beam Safety Barrier			<u> </u>	
1301.1.1	Safety barrier beam (Type-A) including posts and end anchor	lin.m.	2507	12.000	30084.000
1301.1.2	Safety barrier beam (Type-C) including posts and end anchor	lin.m	1351	13.000	17563.000
<del>Valo Romanda da La Junga</del>					
- -	1302 Reflectorised Markers for Safety Barriers				
1303.1	Reflectorised markers attached to guardrail	יג.ת	253	8.000	2024.000
1303.2	Reflectorised markers attached to concrete		N/A		
		13-1	Ca	Carried to summary	49671.000

	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES	OVER A' EN IES	64		
	BILL 13 - SAFETY BARRIERS, DELINEATORS AND FENCES	EATORS	AND FENCE	S	:
Item No	Description	Unit	Estimated	E I	Lt
			Quantity	R.O. Bz	R.O. Bz
St	SUMMARY				
Ъ В В	Page 13-1				49671.000
-					
		13-2	Car	Carried to summary	49671.000

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	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 14 - HIGHWAY SIGNS AND ROAD MARKING	YOVER A EN NIES NROAD A	T IARKING		
Item No		Unit	Estimated	Unit Rate	Amount
ur statulit			Quantity	R.O. Bz	R.O. B2
	1400 HIGHWAY SIGNS AND ROAD MARKING				
	1401 Highway Signs				
1401.1	Highway sign, triangular, size (900 mm)	n.r.	თ	40.000	360.000
1401.2	Highway sign, circular, diameter (900 mm)	n.r.	11	50.000	550.000
1401.3	Highway sign, rectangular, (600 x 2400, 750 x 1400 mm)	ח.ר.	18	200.000	3600.000
1401.4	Highway sign, square,	n.r.	t	50.000	200.000
1401.6.1	Overhead sign post and support assembring cantilever	ה,ר	۲	2,000.000	8000.000
1401.6.2	1401.6.2 Overhead sign post and support assembring gantry	n.r	23	10,000.000	20000.000
		-			
		14-1	Ca	Carried to summary	32710.000

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	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 14 - HIGHWAY SIGNS AND ROAD MARKING	KOVER A EN MES	T IARKING		Persekili kiki ketili kiki ketili kata
Item No		Unit	Estimated	Unit Rate	Amount
			Quantity	R.O. Bz	R.O. Bz
novel of a statement of the	1402 Road Markings				
1402.1	Traffic lines (Mechanically sprayed)	sq. m	2120	1.500	3180,000
1402.2	Special markings (Hand sprayed)	sq. m	950	5,000	4750.000
1402.3	Curb painting (Black and yellow)	sq. m	1537	1.600	2459.200
1402.4	Reflecting road studs	n.r.	1055	4.410	4652.550
1402.5	Non-reflecting road studs	'n.r.	N/A		
1402.6	Reflecting ceramic buttons	ח.ד.	N/A		
1402.7	Non-reflecting ceramic buttons	n.r.	N/A		
Webarri av June vo		·			
		14-2	Car	Carried to summary	15041.750

	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN	YOVER A	f		
	BILL OF QUANTITIES BILL 14 - HIGHWAY SIGNS AND ROAD MARKING	ries d road n	IARKING		
Item No		Unit	Estimated	Unit Rate	Amount
			Quantity	R.O. Bz	R.O. Bz
-bec-sectors	SUMMARY				
	Page 14-1				32710.000
e ça ana su a marca di da c	Page 14-2				15041.750
1911 - 1911 - 1911 - 19					
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<u></u>					
		14-3	To	To Grand Summary	47751.750

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	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 15 - ELECTRICAL INSTALLATION	VOVER A EN TES STALLAT	ION		
Item No	Description	Unit	Estimated	Unit Rate	Amount
14.043,43			Quantity	R.O. Bz	R.O. Bz
	1500 ELECTRICAL INSTALLATION				
	1502 Mcdium Voltage Switching Stations				
1502.1	Medium Voltage Switching Stations	у.г. И			-
a a contra da contra	1503 Package Sub-stations				
1503.1	Package sub-station	r.u			
	1504 Package Medium Voltage Switching Stations				
1504.1	Packing medium voltage switching station				
		15-1	Ca	Carried to summary	

	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES	YOVER A EN MES	E.		
Item No	BILL 15 Description	STALLAT Unit	ION Estimated	Unit Rate	Amount
			Quantity	R.O. Bz	R.O. Bz
	1505 33kV and 11kV Pole Mounted Transformer Stations				
1505.1	33kV pole mounted transformer station	ה.צ.			
1505.2	11kV pole mounted transformer station	n.r.			
an y may air in 187	1506 Feeder Pillars				29 C
1506.1	Feeder pillar	n.r.			2-9 - 10-10-10 - 10-10-10 - 10-10-10
	1507 Cables				deneran paganesepin gan makan
1507.1	Cable (type) (size)	lin.m.			nt sa Standiget on gene generation
-					
		15-2	Ca	Carried to summary	

	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 15 - ELECTRICAL INSTALLATION	YOVER A EN MES STALLAT	T		
Item No	Description	Unit	Estimated	Unit Rate	Amount
			Quantity	R.O. Bz	R.O. Bz
	1508 Road Lighting Masts and Column				
1.8061	righ mast assembly (type) (neight)	ח.ד.			
1508.2	Lighting columns (type) (number of arms) (Height)	n.r.			
<u>, ', /</u>					
	1509 Traffic Sign Illumination				
1509.1	Overhead sign lighting (gantry or cantilever ref no)	n.r.			
1509.2	Roadside sign lighting (sign ref no)	ח.ר.			
-					- Children et al a series de la s
	1510 Recessed Lighting				
1510.1	Recessed lighting (type)	n.r.			
	·				
		15-3	Car	Carried to summary	
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	NN	YOVER A JEN TIES	6		
Item No	BILL 15 - ELECTRICAL INSTALLATION Description Description Description	STALLAT Unit	ION Estimated	Unit Rate	Amount
			Quantity	R.O. Bz	R.O. Bz
	1511 Traffic Signals				
1511.1	Traffic signal installation (location)	lump sum			
	1512 Earthine				
1512.1	Twin rod earthing installation (location)	n.r.			
1512.2	Single rod earthing installation (location)	n.r.		· .	
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■**** \$ \\* *					
		15-4	Ca	Carried to summary	

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	CONSTRUCTION OF FLYOVER AT	YOVER A	L		
	A'NASEEM GARDEN BILL OF QUANTITIES BILL 15 - ELECTRICAL INSTALLATION	)EN FIES STALLAT	ION		
Item No	Description	Unit	Estimated	ΨĚ	Amount
			Quantity	R.O. Bz	R.O. Bz
Charles and an and a state	SUMMARY	·			
	Page 15-1				
7.01 (m. 1	Page 15-2				de transford (de caracteria)
aliteration in the second	Page 15-3				
	Page 15-4				-
	Provisional Sum	Prov Sum		<u> </u>	50000.000
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					Cité de grantes y Ngarans y
		15-5	To	To Grand Summary	50000.000

	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 17 - UTULITIES	OVER A EN IES IES	£4		
Item No	Description	Unit	Estimated	Unit Rate	Amount
			Quantity	R.O. Bz	R.O. Bz
	1700 UTILITIES				
16*Commune 14-16-16	1701 Utilitics				
1701.1	Remove carefully and relocate low voltage electric poles, telephone poles, including removal of lines, excavation, backfilling amd other related works as directed by the Enmineer	prov sum			50000.000
1701.1.1	Protect of existing utilities crossing the roadway as shown in Drawing, or as directed by the Engineer	lin.m.			
ta da de sea de ja					
			c		
		1 · · ·	Cal	Carried to summary	000.00000

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CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 17 - UTULITIES BILL 17 - UTULITIES	No         Description         Unit         Estimated         Unit Rate         Amount           Quantity         R.O. Bz         R.O. Bz         R.O. Bz	SUMMARY	Page 17-1 50000.000				17-2 To Grand Summary 50000.000
	Item No						

	CONSTRUCTION OF FLYOVER AT	YOVER A	£		
	A'NASEEM GARDEN BILL OF QUANTITIES BILL 19 - DAYWORKS	DEN TIES DRKS		-	
Item No	Description	Unit	Estimated	Unit Rate	Amount
			Quantity	R.O. Bz	$R.O. B_z$
	A. WAGES				
	These include proper wages, all used allowance, medical expense and all other charges provided for by local laws				
A.1	Supervisor	hour	100	4.000	400.000
A2	Site Surveyor	hour	1000	3.500	3500.000
A.3	Foreman	hour	480	3.200	1536,000
A.4	1st Class Operator	hour	480	1.100	528.000
A.5	2nd Class Operator	hour	100	0.950	95.000
A.6.	Mechanic	hour	190	1.000	190.000
A.7	Driver	hour	480	1.000	480.000
A.8	Skilled Labour	hour	1000	0.650	650.000
A.9	Semi Skilled Labour	hour	1000	0.600	600.000
		1-61	Cai	Carried to Summary	7979.000

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ur Bila bait seventer.	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN	YOVER A JEN	Т	-	
- 1907 Martinese com	BILL OF QUANTITIES BILL 19 - DAYWORKS	ries RKS			
Item No	Description	Unit	Estimated Quantity	Unit Rate R.O. Bz	Amount R.O. Bz
A.10	Ordinary Labour	hour	1000	Ö	18
A.11	Mason	hour	200	0.650	130.000
A 12	Painter	hour	001	0.750	75.000
A.13	Carpenter	hour	200	0.650	130.000
A.14	Steel Fitter	hour	100	0.650	65.000
A.15	Electrician	hour	30	0.850	17.000
		19-2	Car	Carried to Summary	967,000

Item No       Description       Unit         B. OPERATING EQUIPMENT ON SITE       B. OPERATING EQUIPMENT ON SITE       Unit         B. OPERATING EQUIPMENT ON SITE       E. OPERATING EQUIPMENT ON SITE       Description interest,         These rate include : fuel and lubricants cost, charges for depreciation interest, repairs, maintenance, spare parts, tyres, insurance, otc.       Payment will not be made for mechanics or maintenance, otc.         Payment will not be made for mechanics or maintenance intervest, repairs, maintenance, otc.       Payment will not be made for mechanics or maintenance, otc.       hour         B.1       Motorgrader from 100 hp up to 120 hp       point       hour         B.2       Motorgrader from 120 hp up to 150 hp       hour       hour         B.3       Tractor from 60 to 100 hp       pto 150 hp       hour       hour         B.4       Bulldozer with ripper from 100 hp to 150 hp       ho       hour       hour         B.4       Bulldozer with ripper from 100 hp to 150 hp       ho       hour       hour         B.5       Bulldozer with ripper from 100 hp to 150 hp       ho       hour       hour         B.5       Bulldozer with ripper from 200 hp to 200 hp       ho       ho       ho       ho         B.7       Bulldozer with ripper from 250 hp       ho       ho       ho       ho       <	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 19 - DAYWORKS	_		
<ul> <li>B. OPERATING EQUIPMENT ON SITE</li> <li>B. OPERATING EQUIPMENT ON SITE</li> <li>These rate include : fuel and lubricants cost, charges for depreciation interest, repairs, maintenance, spare parts, tyres, insurance, etc.</li> <li>Payment will not be made for mechanics or maintenance time which shall be include in and spread over the rates.</li> <li>Motorgrader from 100 hp up to 120 hp</li> <li>Motorgrader from 100 hp up to 120 hp</li> <li>Motorgrader from 100 hp up to 150 hp</li> <li>Tractor from 60 to 100 hp</li> <li>Tractor from 60 to 100 hp</li> <li>Bulldozer with ripper from 150 hp to 150 hp</li> <li>Bulldozer with ripper from 100 hp to 150 hp</li> <li>Bulldozer with ripper from 200 hp to 200 hp</li> <li>Bulldozer with ripper from 200 hp to 200 hp</li> <li>Bulldozer with ripper from 200 hp to 200 hp</li> <li>Bulldozer with ripper from 200 hp to 200 hp</li> <li>Bulldozer with ripper from 200 hp to 200 hp</li> </ul>	Unit	Estimated	Unit Rate	Amount
<ul> <li>B. OPERATING EQUIPMENT ON SITE</li> <li>These rate include: fuel and lubricants cost, charges for depreciation interest, repairs, maintenance, spare parts, tyres, insurance, etc.</li> <li>Payment will not be made for mechanics or maintenance time which shall be include in and spread over the rates.</li> <li>Motorgrader from 100 hp up to 120 hp</li> <li>Motorgrader from 120 hp up to 150 hp</li> <li>Motorgrader from 120 hp up to 150 hp</li> <li>Tractor from 60 to 100 hp</li> <li>Bulldozer with ripper from 100 hp to 150 hp</li> <li>Bulldozer with ripper from 100 hp to 200 hp</li> <li>Bulldozer with ripper from 200 hp to 200 hp</li> <li>Bulldozer with ripper from 200 hp to 200 hp</li> <li>Bulldozer with ripper from 200 hp to 200 hp</li> </ul>		Quantity	R.O. Bz	R.O. Bz
These rate include : fuel and lubricants cost, charges for depreciation interest, repairs, maintenance, spare parts, tyres, insurance, etc. Payment will not be made for mechanics or maintenance, etc. Payment will not be made for mechanics or maintenance time which shall be include in and spread over the rates. Motorgrader from 100 hp up to 120 hp Motorgrader from 120 hp up to 120 hp Tractor from 60 to 100 hp Bulldozer with ripper from 100 hp to 150 hp Bulldozer with ripper from 150 hp to 200 hp Bulldozer with ripper from 200 hp to 200 hp Bulldozer with ripper from 250 hp to 300 hp Wheel tractor up to 50 hp				
Motorgrader from 100 hp up to 120 hp Motorgrader from 120 hp up to 150 hp Tractor from 60 to 100 hp up 150 hp Bulldozer with ripper from 150 hp to 200 hp Bulldozer with ripper from 200 hp to 250 hp Bulldozer with ripper from 200 hp to 250 hp Wheel tractor up to 50 hp	n interest,   1 shall be	<u>, , , , , , , , , , , , , , , , , , , </u>		
Motorgrader from 120 hp up to 150 hp Tractor from 60 to 100 hp Bulldozer with ripper from 100 hp to 150 hp Bulldozer with ripper from 150 hp to 200 hp Bulldozer with ripper from 200 hp to 250 hp Bulldozer with ripper from 250 hp to 300 hp Wheel tractor up to 50 hp	hour	ъ	9.500	47.500
Tractor from 60 to 100 hp Bulldozer with ripper from 100 hp to 150 hp Bulldozer with ripper from 150 hp to 200 hp Bulldozer with ripper from 200 hp to 200 hp Bulldozer with ripper from 250 hp to 300 hp Wheel tractor up to 50 hp	hour	11	11.500	126.500
Bulldozer with ripper from 100 hp to 150 hp Bulldozer with ripper from 150 hp to 200 hp Bulldozer with ripper from 200 hp to 250 hp Bulldozer with ripper from 250 hp to 300 hp Wheel tractor up to 50 hp	hour	<u>ہ</u>	4.000	20.000
Bulldozer with ripper from 150 hp to 200 hp Bulldozer with ripper from 200 hp to 250 hp Bulldozer with ripper from 250 hp to 300 hp Wheel tractor up to 50 hp	hour	10	7.000	35.000
Bulldozer with ripper from 200 hp to250 hp Bulldozer with ripper from 250 hp to 300 hp Wheel tractor up to 50 hp	hour	t~	S.000	56.000
Bulldozer with ripper from 250 hp to 300 hp Wheel tractor up to 50 hp	hour	9	1S.000	108.000
Wheel tractor up to 50 hp	hour	4	19.500	78.000
10.2	hour	10	4.000	40.000
	19-3	Car	Carried to Summary	511.000

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	BILL OF QUANTITIES BILL 19 - DAYWORKS	ITIES ORKS			
Item No	Description	Unit	Estimated	ايد ا	+
B.9	Wheel tractor over 50 hp	hour	2 udu uly 10	7.000	70.000 70.000
B.10	Motor scraper capacity up to 18 cu.m.	hour	OT	19.000	190.000
B.11	Motor scraper capacity from 18 to 24 cu.m.	hour	10	19.000	190,000
B.12	Sheeps foot roller, from 5 tonnes to 10 tonnnes	hour	10	5.000	50.000
B.13	Grid roller	hour	4	7.000	28.000
B.14	Vibratory compactor with prime mover up to 5 tonnes	hour	4	5.000	20.000
B.15	Vibratory compactor with prime mover from 5 to 10 tonnes	hour	4	7.000	28.000
B.16	Pneumatic compactor with prime mover from 30 to 50 tonnes	hour	4	7.000	28.000
B.17	Pneumatic self-propelled rollers from 15 to 20 tonnes	hour	00	4.500	36.000
B.18	Tandem roller up to 8 tonnes	hour	24	4.500	108.000
B.19	Tandem roller from S to 12 tonnes	hour	ø	5.000	40,000
		19-4	C <sup>a)</sup>	Carried to Summary	788 000

	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 19 - DAYWORKS	YOVER A EN TIES RKS	£t		
Item No	Description	Unit	Estimated	l el l	님
B.20	Triaxle roller from 10 to 15 tonnes	hour	Quantity 24	5.000 5.000	120.000
B.21	Light frog- rammer 0.1 tonne	hour	50	0.500	10.000
B.22	Hcavy frog-rammer 0.5 tonne	hour	20	0.700	14.000
B.23	Wheel loder 1.2 to 1.6 cu.m.	hour	50	9.500	190.000
B.24	Wheel loder 1.6 to 2.0 cu.m.	hour	20	10.000	200.000
B.25	Wheel loder 2.0 to 2.5 cu.m.	hour	50	11.000	220.000
B.26	Excavator up to 0.8 cu.m.	hour	12	5.500	82.500
B.27	Excavator from 0.8 to 1.2 cu.m.	hour	15	7.500	112.500
B.28	Bituminous mixing plant with batching apparatus up to 80 t/h.	hour	ŝ	18.000	90.000
B.29	Bituminous mixing plant with batching apparatus from 80 to 150 t/h.	hour	ŝ	23.000	115.000
B.30	Finisher up to 80 t/h.	hour	10	9.000	90.000
		19-5	Ca	Carried to Summary	1244.000

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	BILL OF QUANTITIES BILL 19 - DAYWORKS	ITIES ORKS			
Item No	Description	Unit	Estimated Quantity	Unit Rate R.O. Bz	Amount R.O. Bz
B.31	Finisher from 80 t/h to 120 t/h.	hour	10	10.000	100,000
B.32	Bitumen sprayer up to 6 tonnes	hour	10	5.000	50.000
B.33	Tanker truck up to 6 cu.m.	hour	15	5.000	75.000
B.34	Dump truck up to 10 tonnes	hour	17	5.500	93.500
B.35	Dump truck from 10 to 15 tonnes	hour	50	6.000	120.000
B.36	Screening plant from 80 to 100 t/h.	hour	IJ	16.000	80.000
B.37	Crushing plant from 40 to 60 t/h.	hour	Ŀ	20.000	100.000
B.3S	Crushing plant with primary and secondary from 60 to 100 t/h.	hour	IJ	30.000	150.000
B.39	Air compressor up to 6000 l/m.	hour	15	1.500	22,500
B.40	Air compressor over 6000 l/m.	hour	1.5	2.000	30.000
B.41	Mechanical broom	hour	t~	4.000	28.000
		19-6	Ca	Carried to Summary	849.000

Item No B.42 Powe	Description	JAYWORKS			
		Unit	Estimated	Unit Rate P.O. R.	Amount FO R7
	Power water pump	hour	2 uauury 118	0	2
B.43 Steel	Steel cutting machine	hour	Ŋ	0.800	4.000
B.44 Steel	Steel bending machine	hour	сı	1.200	6.000
B.45 Belt	Belt conveyor	hour	ß	7.000	35.000
B.46 Conc	Concrete mixer up to 0.5 cu.m.	hour	10	2.000	20.000
B.47 Conc	Concrete mixer over 0.5 cu.m.	hour	12	4.000	48.000
B.48 Auto	Automatic concrete batch plant without mixing drum	hour	ß	7.500	37.500
B.49 Tran	Transmixer up to 5 cu.m.	hour	10	6.500	65.000
B.50 Conc	Concrete vibrators	hour	60	0.150	8.850
B.51 Cran	Crane up to 5 tonnes.	hour	თ	4.500	40.500
B.52 Cran	Crane with broom and jib 5 to 10 tonnes	hour	l.~	S.000	56.000
		19-7	Cat	Carried to Summary	403.450

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	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 19 - DAYWORKS	YOVER A JEN TIES RKS	E		
Item No	Description	Unit	Estimated	Unit Rate	Amount
сы Д		,	Quantity	R.O. Bz	R.O. Bz
20.0	Crane with boom and jib over 10 tonnes	hour	L-	000.11	77.000
B.54	Generator 60 kw	hour	ß	1.500	7.500
B.55	Generator 75 kw	hour	ъ	1.800	9.000
B.56	Drilling equipment	hour	C)	0.200	1.000
B.57	Generator 100 kw	hour	IJ	3.000	15.000
B.58	Generator 150 kw	hour	C1	4.000	20.000
B.59	Generator 200 kw	hour	ĸ	5.000	25,000
B.60	Gravel strewer	hour	ы	10,000	50.000
-		19-8	Car	Carried to Summary	204.500

	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES	OVER A EN IES	f		
	BILL 19 - DAYWORKS	KKS			
Item No	Description	Unit	Estimated	ا <del>ي</del> د ا	뉨
			Quantity	R.O. Bz	R.O. Bz
	C. MATERIALS				
	These rates include all the charges for the supply of the materials, loading, transport to site, unloading and stores as well as all the charges provided for in the General and Special Specifications and in the Contract.				
C.1	Aggregate for granular sub-base course in accordance with the General and Special Specifications, in place as specified.	cu.m.	20	1.000	50.000
C.2 C	Aggregate for granular aggregate base course in accordance with the Gener Special Specifications, in place as specified.	cu.m.	25.	3.000	20.000 20.000
°° °°	Aggregate for bituminous base course in accordance with the General and Special Specifications, near the asphalt plant, in bulk	cu,m.	20	2.000	100.000
C 4	Fine aggregate for concrete, in accordance with the General and Special Specifications, in place, in bulk	cu.m.	25	6000	50.000
о. S	Coarse aggregates for concrete, in accordance with the General and Special specifications, in place, in bulk	cu m.	20	1.200	60.000
		19-9	Ca	Carried to Summary	310.000

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	CONSTRUCTION OF FLYOVER AT A'NASEEM GARDEN BILL OF QUANTITIES BILL 19 - DAYWORKS	XUVER A VEN TIES RKS	3		
Item No	Description	Unit	Estimated Quantity	Unit Rate R.O. Bz	Amount R.O. Bz
C.6	Stone for drainage, masonry and slope protection, in accordance with the General and Special Specifications in place	cu.m.	25	ભં	63
0.7	Asphalt comont, grade 60-70 on site	ton	1	44,000	44.000
C.8	Asphalt coment, grade 50-60 on site	ton	-1	48.000	48,000
C.9	Emulsified asphalt, grade RS-1 on site	ton	-4	70.000	70.000
C.10	Cutback asphalt, MC and RC type on site	ton	1	75.000	75.000
C.11	Portland coment on site	ton	1	25.000	25.000
C.12	Deformed billet steel bars, AASFITO M 31 grade 60 (High Yield) of any diameter	ton	1	135.000	135.000
C.13	Deformed billet steel bars AASHTO M 31 grade 40 (Mild) of any diameter	ton	rei	135.000	135.000
C.14	Highway signs	sq.m.	ო	32.000	96.000
C.15	Highway sign supports - 1 post	ָ אר ג	4	15.000	60.000
		01-61	Ca	Carried to Summary	750.500

	A'NASEEM GARDEN BILL OF QUANTITIES BILL 19 - DAYWORKS	JEN TIES RKS			
Item No	Description	Unit	Estimated Quantity	Unit Rate R.O. Bz	Amount R.O. Bz
C.16	Highway sign supports - 2 post	nr.	8	20.000	40.000
C.17	Timber plank, on site	cu.m.	ы	105.000	210.000
C.18	Timber props, on site	cu.m.	ભ	105.000	210.000
C.19	Wiro mesh gabgions, on site	ton	0.5	320.000	160.000
C.20	Explosive, on site	ku.	10	20.000	100.000
C.21	Gas oil, on site	litre	100	0.080	8.000
C.22	Gasoline. on site	litre	500	0,120	60.000
C.23	Lubricant	kç.	10	0.300	1.500
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	BILL OF QUANTITIES BILL 19 - DAYWORKS	JEN FIES RKS			
Item No	Description	Unit	Estimated	۲ <u>א</u>	l H
SUMMARY			Quanty	K.O. BZ	K.U. Bz
Page 19-1					7979.000
Page 19-2 Page 19-3					967.000 511.000
Page 19-4				~~~~~	788.00
Page 19-5					1244.000
Page 19-6					S49.000
rage 13-7 Doct 10 0					403,45
Pare 19-9					310,000
Page 19-10					750.50
Page 19-11					789.50
		<b>.</b>			
		19-12	- U	 To Grand Summary	14795.950

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## **BILL OF QUANTITIES**

## **GRAND SUMMARY**

		Amount
Bill No	Description	R.O.
1	Preliminaries	423590.000
2	Earthworks	126927.300
3	Granular and stabilized subbase, basecourse and stabilized subgrade	37036.800
4	Bituminous Pavement	217995.200
5	Concrete and concrete structure	1384000.000
6	Structural steel and other metal work	104400.000
7	Paint	N/A
8	Drainage and service ducts	18469.400
9	Slope protection and stabilization	1400.000
10	Piling	N/A
11	Bridge bearing, expansion joints, joint seals and fillers	78440.000
12	Sidewalks, paved areas and kerbs	9388.000
13	Safety barriers, delineators and fences	49671.000
14	Highway signs and road marking	47751.750
15	Electrical installations	50000.000
16	Landscape and irrigation	N/A
17	Utilities	50000.000
18	Plant and Equipment	N/A
19	Dayworks	14795.950
	Sub-total	2613865.400
	Contingencies (10%)	261386.540
	TOTAL CONTRACT VALUE (R.O)	2875251.940

(IN WORDS, THE TOTAL TENDER VALUE IS RIAL OMANI)

NAME OF TENDERER

DATE

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SIGNATURE OF TENDERER

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